

WHAT IS CLAIMED IS:

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1. A method for allocating radio resource to radio terminals or communication connections in a radio communication system in which each of said radio terminals or communication connections requires  
10 a different communication quality, said method comprising the steps of:

15 (a) retrieving a first group including radio terminals or communication connections in which actual communication qualities are degraded more than required communication qualities, and a second group including radio terminals or communication connections in which actual communication qualities are favorable more than required communication qualities; and

20 (b) allocating the radio resource to the radio terminals or communication connections in said first group with higher priority than the radio terminals or communication connections in said second group.

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2. The method as claimed in claim 1,  
30 further comprising the steps of:

(c) retrieving a third group including radio terminals or communication connections that do not have required communication qualities;

35 (d) allocating the radio resource to the radio terminals or communication connections in said third group when the radio resource is allocated to the radio terminals or communication connections in

said first group and said second group in said step (b).

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3. The method as claimed in claim 1,  
wherein said step (b) allocates the radio resource to  
the radio terminals or communication connections in  
10 said first group in an ascending order of said actual  
communication qualities, an descending order of  
differences between said required communication  
qualities and said actual communication qualities, or  
an descending order of deterioration degrees of the  
15 actual communication qualities to the required  
communication qualities.

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4. The method as claimed in claim1,  
wherein said step (b) allocates the radio resource to  
the radio terminals or communication connections in  
said second group in an ascending order of said  
25 actual communication qualities, an ascending order of  
differences between said required communication  
qualities and said actual communication qualities, or  
favorable degrees of the actual communication  
qualities to the required communication qualities.

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35 5. The method as claimed in claim 1,  
wherein said required communication qualities are  
communication qualities concerning allowable delay

times, transmission rates, or throughputs.

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6. A radio communication apparatus for  
allocating radio resource to radio terminals or  
communication connections in a radio communication  
system in which each of said radio terminals or  
10 communication connections requires a different  
communication quality, said radio communication  
apparatus comprising:

15 a first retrieving part retrieving a first  
group including radio terminals or communication  
connections in which actual communication qualities  
are degraded more than required communication  
qualities, and a second group including radio  
terminals or communication connections in which  
actual communication qualities are favorable more  
20 than required communication qualities; and

25 a first allocating part allocating the  
radio resource to the radio terminals or  
communication connections in said first group with  
higher priority than the radio terminals or  
communication connections in said second group.

30 7. The radio communication apparatus as  
claimed in claim 6, further comprising:

35 a second retrieving part retrieving a  
third group including radio terminals or  
communication connections that do not have required  
communication qualities;

a second allocating part allocating the  
radio resource to the radio terminals or

communication connections in said third group when  
the radio resource is allocated to the radio  
terminals or communication connections in said first  
group and said second group by said first allocating  
5 part.

10               8. The radio communication apparatus as  
claimed in claim 6, wherein said first allocating  
part allocates the radio resource to the radio  
terminals or communication connections in said first  
group in an ascending order of said actual  
15 communication qualities, an descending order of  
differences between said required communication  
qualities and said actual communication qualities, or  
an descending order of deterioration degrees of the  
actual communication qualities to the required  
20 communication qualities.

25               9. The radio communication apparatus as  
claimed in claim 6, wherein said first allocating  
part allocates the radio resource to the radio  
terminals or communication connections in said second  
group in an ascending order of said actual  
30 communication qualities, an ascending order of  
differences between said required communication  
qualities and said actual communication qualities, or  
favorable degrees of the actual communication  
qualities to the required communication qualities.

10. The radio communication apparatus as  
claimed in claim 6, wherein said required  
5 communication qualities are communication qualities  
concerning allowable delay times, transmission rates,  
or throughputs.

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11. A radio communication system which  
allocates radio resource for a radio communication,  
said radio communication system comprising a radio  
15 communication apparatus and radio terminals,  
wherein each of said radio terminals  
comprises a requiring part requiring a different  
communication quality to said radio communication  
system for each radio terminal or communication  
20 connection, and  
said radio communication apparatus  
comprises:  
a first retrieving part retrieving a first  
group including radio terminals or communication  
25 connections in which actual communication qualities  
are degraded more than required communication  
qualities, and a second group including radio  
terminals or communication connections in which  
actual communication qualities are favorable more  
30 than required communication qualities; and  
a first allocating part allocating the  
radio resource to the radio terminals or  
communication connections in said first group with  
higher priority than the radio terminals or  
35 communication connections in said second group.

12. The radio communication system as  
5 claimed in claim 11, wherein said radio communication  
apparatus further comprises:

a second retrieving part retrieving a  
third group including radio terminals or  
communication connections that do not have required  
10 communication qualities;

a second allocating part allocating the  
radio resource to the radio terminals or  
communication connections in said third group when  
the radio resource is allocated to the radio  
15 terminals or communication connections in said first  
group and said second group by said first allocating  
part.